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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------------|------------------|
| 09/994,954  | 11/27/2001  | Cyril Cabral, JR.    | YOR919990509US2<br>(13171A) | 3708             |
| 7590  | 12/05/2003  |                      | EXAMINER                    |                  |
| SCULLY, SCOTT, MURPHY & PRESSER<br>400 Garden City Plaza<br>Garden City, NY 11530 |             |                      |                             | KIELIN, ERIK J   |
|   |             | ART UNIT             |                             | PAPER NUMBER     |
|   |             | 2813                 |                             |                  |

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                        |                        |                     |
|------------------------|------------------------|---------------------|
| <b>Advisory Action</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                        | 09/994,954             | CABRAL, ET AL.      |
|                        | <b>Examiner</b>        | <b>Art Unit</b>     |
|                        | Erik Kielin            | 2813                |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

THE REPLY FILED 13 November 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a)  The period for reply expires 3 months from the mailing date of the final rejection.
- b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2.  The proposed amendment(s) will not be entered because:
  - (a)  they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b)  they raise the issue of new matter (see Note below);
  - (c)  they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d)  they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5.  The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7.  For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: none.

Claim(s) objected to: none.

Claim(s) rejected: 23,25-28,31 and 36-41.

Claim(s) withdrawn from consideration: 24 and 32-35.

8.  The drawing correction filed on \_\_\_\_\_ is a) approved or b) disapproved by the Examiner.

9.  Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.

10.  Other: \_\_\_\_\_

  
**ERIK J. KIELIN**  
**PRIMARY EXAMINER**

Continuation of 2. NOTE: Forming a SiGe interlayer of less than about 3.0 nm is both a new issue and generates new matter since the specification fails to provide support for this. While Fig. 5 is noted there exists no information regarding the size of the region upon which EDX analysis was done. Moreover, Fig. 5 is drawn to a single example and does not provide support for the scope presently claimed. The new limitation in claim 40 that the first metal layer and the substrate are "separated by a Si-Ge interlayer positioned on an interface between said first layer and said substrate, wherein said Si-Ge interlayer does not substantially extend beyond said interface" is a new issue.

Continuation of 5. does NOT place the application in condition for allowance because: The declaration provided by Applicant misrepresents the rejection proffered by Examiner and does nothing but support Examiner's position. More specifically, SiGe cannot be formed absent diffusion. "Intermixing" by definition is diffusion. Finally it is noted that the claimed feature over which the rejection was made has been removed in the Amendment after final .